

Date: Tue, 26 Oct 93 04:30:39 PDT  
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>  
Errors-To: Ham-Homebrew-Errors@UCSD.Edu  
Reply-To: Ham-Homebrew@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Homebrew Digest V93 #84  
To: Ham-Homebrew

Ham-Homebrew Digest                Tue, 26 Oct 93                Volume 93 : Issue 84

Today's Topics:

    8 pin Mic. connectors source?  
    Homebrew SSB  
    INTERMOD  
    Need Louder PC Speaker for Code Practice.  
    QRP Mail List  
    Ramsey Power amp kits  
    Test osc/KA1KJZ needs

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>

Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Mon, 25 Oct 93 19:41:44 GMT  
From: netcon!bongo!skyld!jangus@locus.ucla.edu  
Subject: 8 pin Mic. connectors source?  
To: ham-homebrew@ucsd.edu

Here we go again.

I need to find a source of the Microphone Connectors used with most of todays equipment. This is the 8 Pin connector with a threaded sleeve. The female cord mounted connector is a Radio Shack 276-025 listed on page of the new (coupon enhanced) catalog. They used to stock the mating male chassis receptical. Philco carries them in some electronics and HAM stores, as part number T-700 and P-700 as well.

If you want to tell me that your Radio Shack store still has them, fine, let me know who much and how many and I'll arrange to buy them through you.

If you have a vendor source for these (like Allied or Newark and yes I already checked with them and they don't have them) let me know as well.

73 es GA from Jeff

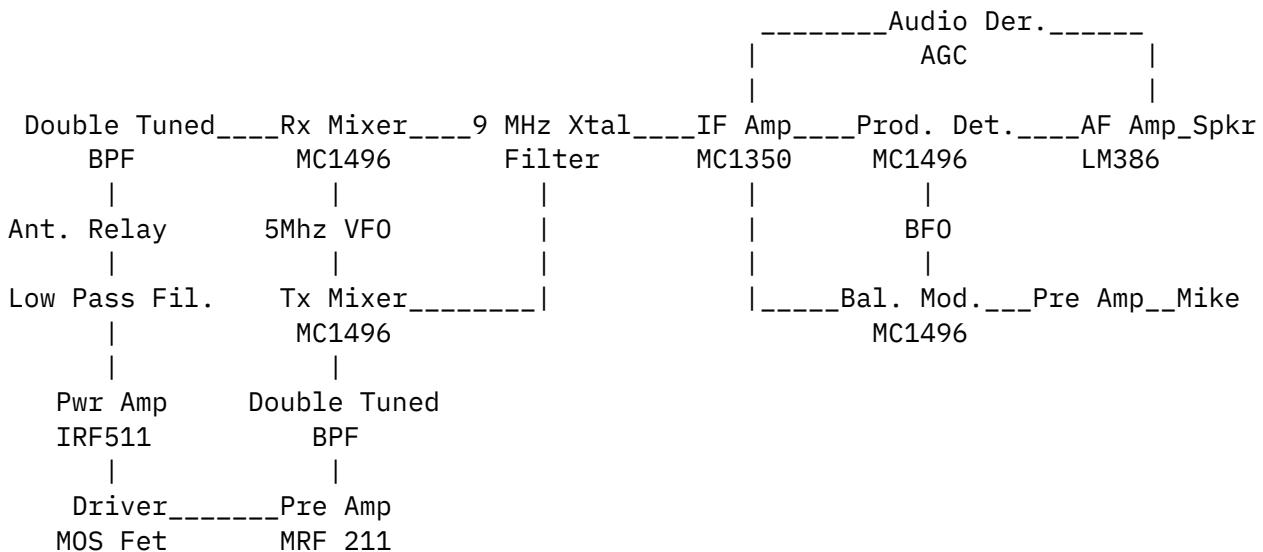
(Note, Newark does stock the old Motorola series 3/4" dia mic connectors)

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our  
Internet: jangus@skyld.tele.com | universe run by a single omni-  
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a  
Phone: 1 (310) 324-6080 | badly run corporation."

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Date: 25 Oct 93 18:35:39 GMT  
From: auratek!epacyna@uunet.uu.net  
Subject: Homebrew SSB  
To: ham-homebrew@ucsd.edu

Here is a quick round down on a 20M SSB transceiver I built.



Hopefully the above is worth a thousand words. As you can see the receiver is just (4) IC's. The Xtal filter is a commerical unit (6 pole 2.4KHz BW). T/R

control is PPT. The entire transceiver (expect Tx power amp) is on a PCB about 6" x 5". Never got around to putting it all in a box (yes my QSO's were made with just the PCB's on the bench). When I get around to it I've got a TenTec TG28 (8"w x 6"d x 2"h) set aside. The power amp is on a 2" x 4" PCB and will go on the outside back panel w/ a heat sink. The transmitter is (3) IC's plus (3) MOS Fet amps. The VFO is (2) FET's and the BFO (1) FET. Tuning range is currently 14.15 - 14.35MHz with a 6:1 reduction drive.

Although I've worked a fair number of stations (including DX) with the 1 watt output, I've just designed a new 20W power amplifier. The driver is capable of up to 300Mw output (and can be reduced by turning down the gate bias pot.).

Could be built for 75M by just using different L/C values in the tuned circuits for the (2) BPF and LP filter.

I also recall a 20M SSB transceiver design (however, not a great one) published in QST (december, january issue around 1990). There is also a chapter in Solid State Design for the Amateur that has some SSB designs (think its the chapter on modulation).

73

Ed W1AAZ

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Date: 25 Oct 1993 21:02:55 GMT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!library.ucla.edu!  
europa.eng.gtefsd.com!howland.reston.ans.net!math.ohio-state.edu!  
news.acns.nwu.edu!casbah.acns.nwu.edu!lapin@network.ucsd.edu  
Subject: INTERMOD  
To: ham-homebrew@ucsd.edu

In article <180CT199311442350@vax2.concordia.ca>,  
DENIS ROBERT, VE2ILF <drobert@vax2.concordia.ca> wrote:

>  
> Hi everyone, This question should concern every soul that ever attempted  
>to operate an H.T. in a mobile using a Mag Mount or other type of external  
>'gain' antenna in a large city: >>>> INTERMOD ! The solution seems quite  
>simple ... I noticed that when I'm swamped with intermod, going back to the  
>'ducky' usually solves the problem at least partially. If one could attenuate  
>the incoming signals from the external antenna on receive only and not affect  
>anything during transmit, you would have the perfect combination for an H.T. in  
>a car ... So what is really needed for so many of us is a "variable rf in-line  
>attenuator" that would be rf-switched-out during transmit.

>  
> Any ideas out there?  
>  
> Thanks & 73 de Denis.

A friend of mine (Rajiv AA9CH) suggested a solution that I tried but didn't get it to work. I didn't really spend much time on this (intermod is almost non-existent for most of my operating area) and it seems logical so here goes:

At the HT, place a T-connector with one leg going to the gain antenna. The open leg should be connected to a shorted 1/4 wave piece of coaxial cable, which appears as an open circuit at the frequency it is cut for and as a short circuit at frequencies far away (such as the pagers that cause many of the intermod problems). This seems like a pretty nifty little bandpass filter for the front end of the HT.

Since I don't live in an area with much intermod, I never spent much time examining this idea. I'd be interesting in hearing what others think of it.

Greg Lapin KD9AZ

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Date: Mon, 25 Oct 1993 19:12:57 GMT  
From: butch!netcomsv!attain!icd.teradyne.com!news@uunet.uu.net  
Subject: Need Louder PC Speaker for Code Practice.  
To: ham-homebrew@ucsd.edu

In article <CF9Ft3.9H8@srgenprp.sr.hp.com> alanb@srgenprp.sr.hp.com (Alan Bloom) writes:  
-Richard L Barnaby (rbarnaby@world.std.com) wrote:  
-: I'd like to add a simple speaker to an IBM PC that is externally  
-: controlled. Just an op-ap, a pot, and a speaker? Tap into the  
-: pc's speaker "jack"?

Friendly warning - on most PCs, one side of the speaker is tied to +5. If you do add an external speaker jack, make sure it is insulated from ground!

/mike

--  
\\/ Michael L. ArdaI N1IST Teradyne ATG Boston  
-----  
/\\ ardai@maven.dnet.teradyne.com  
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Date: Mon, 25 Oct 93 21:08:42 GMT

From: walter!porthos!blitzen!karayan@uunet.uu.net  
Subject: QRP Mail List  
To: ham-homebrew@ucsd.edu

A couple of weeks ago, somebody posted a QRP construction article, where he mentioned the existence of a QRP mailing list. I lost that article and don't know who it was. Does anybody have any info on that mailing list? How do I get on it?

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George Karayannopoulos  
karayan@cc.bellcore.com

N20WO  
Bellcore, Red Bank, NJ

Disclaimer: The opinions expressed here are mine and not my employer's.

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Date: 25 Oct 1993 17:14:22 GMT  
From: olivea!inews.intel.com!ilx018-bb.intel.com!ilx049!dbraun@uunet.uu.net  
Subject: Ramsey Power amp kits  
To: ham-homebrew@ucsd.edu

Anyone know if the Ramsey 40-watt 2M power amp kit is any good?  
(I'm not holding my breath...). I need a basic brick for my  
HT so I can better hit MIR, SAREX, etc. I don't need  
one with a receive pre-amp. Any other advice on that  
to get or avoid in 2M amps would be appreciated.

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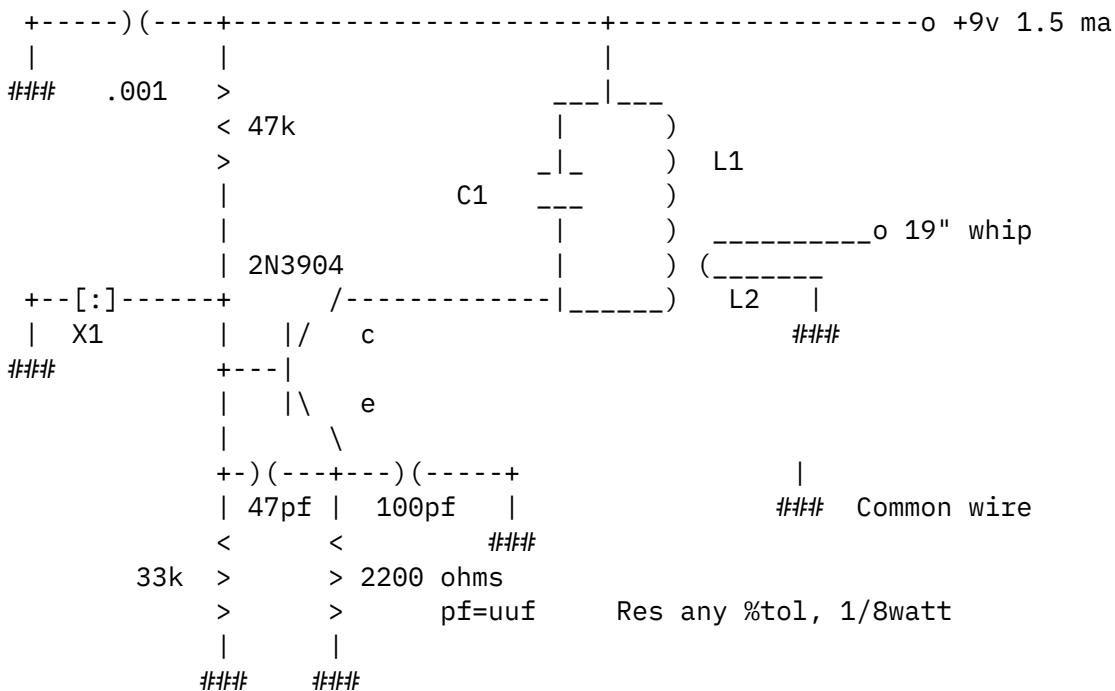
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Doug Braun      Intel Israel, Ltd.      M/S: IDC1-41  
Tel: 011-972-4-655069      dbraun@inside.intel.com

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Date: Mon, 25 Oct 93 19:03:44 GMT  
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!newsserver.jvnc.net!  
a3bee2.radnet.com!cyphn!randy@network.ucsd.edu  
Subject: Test osc/KA1KJZ needs  
To: ham-homebrew@ucsd.edu

Ok...sence Email won't work, lets try THIS way...



X1 to be any submultiple of the desired F0    F0/9 being the closest you can get, cuz the xtal runs in its fundamental mode only.

A 3.58 mc TV crystal will , on 41st harmonic, give 2 mtrs +/- error of course, ... so you may wanna keep that in mind.

putting a series cap---variable--- to the xtal (get one a hair low in freq)...you can tune it up to proper freq. Use => 70 pf to do it.

Coil L1 to be .05 to .1 uh    6 turns on a bic pen body, adj length to help C1...10-20 uuf variable ( or use 10uuf fixed and adj coil only)

Coil L2 to be 1 - 1.5 turns...leading direct to ant whip.

#### HOW IT WORKS

The ckt is plain ol' R-C osc, with 47 pf and 100pf ( which may need to be made twice the values in some cases\* ) as the feed back caps.

The collector sees gnd AT the xtal fo due to the tiny uh there...BUT the coil L1 and C1 act as a trap for 146mc band, and so extract what little amount of harmonic energy there is ( not much , but...).

The osc then operates like any other, other wise...you'd NORMALLY take RF from the emitter via 4.7 to 10 pf.

In THIS case tho, we WANT the harmonic, so L1-C1-L2 is put to use.

RF out put is on the order of u-watts ... suited for use as sig gen to align radio sets with, or to acid test the hearing ability of it's user. (abuser?)

The cheapest of 9v battery's will give 15ma for 28 hrs...so HERE we are

talking about like 280 hrs...no need for a power supply

As this ckt will work from 5 to 18 volts....  
you could series up AA cells or solar cells if you wanted to...

#### HOW TO USE

As you get rig aligned so it can hear the test osc up close, just move it further away.

Receiver to have a 56 ohm resistor in place of the antenna, so you don't have have to put the test osc across the street to make it weak enough to be 50% full quieting.

After tweaking Rx for best reception, re-move test osc futher away...etc.

\* In some osc's 47 pf has to be 100pf and 100pf has to be 180-220pf.

This affects exact freq and is dependant on what frq xtal you use.  
the 47/100pf was for 10.7 mc but the 100/180-220pf was for 3.58 mc.

If osc fails to work and you KNOW its hooked up right-transistor is good,  
then change those 2 caps...maintain about 1:2 ratio between 'em  
Practical values will be \*with-in\* 4.7pf to 470pf for freqs of  
100kc thru about 16mc (fundamental modes)

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Randy KA1UNW

If you get a shock while  
servicing your equipment,  
DON'T JUMP!

"Works for me!"

randy@192.153.4.200

You might break an expensive tube!

-Peter Keyes

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End of Ham-Homebrew Digest V93 #84

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